

		Organic Chemistry 1, Jasperse, Wade Version 8 (42 class days, 38 lectures) Other version of Wade, or other textbooks: <ul style="list-style-type: none"> http://web.mnstate.edu/jasperse/Chem350/Other-Textbooks.html 	Reading
	Date	Topic	Assignment
1	Aug. 27	Intro. Why Carbon is Special, Normal bonding, Lewis Structures in Organic	1.1-1.6
2	Aug. 29	1. Normal Bonding. 2. Formal Charge and Abnormal Bonding. 3. Electronegativity	1.7, 1.4-1.8
3	Aug. 31	1. Structural formulas: Full, Condensed, and Skeletal 2. Resonance Structures	1.9-1.12
4	Sept. 3	Labor Day Holiday	No Class
5	Sept. 5	1. Mechanism/Arrow-pushing. 2. Acid-Base Chemistry. 3. Anion Stability Patterns.	1.13-14
6	Sept. 7	VSEPR 3D Shape. Drawing 3D; Hybridization; Pi bonds; Isomers,	2.1-2.8
	Sept. 10	Polarity IMF, Boiling Points, Solubility. Catchup. Functional Groups	2.9-2.11
7	Sept. 12	Functional Groups. Alkane Nomenclature	2.12-2.14
8	Sept. 14	Alkane Nomenclature. Newman Projections; Torsional and Steric Strain; Cycloalkanes	3.1-3.9
9	Sept. 17	Cyclohexane Chairs, Cis-and-Trans, Structural Isomers	3.9-3.15
10	Sept. 19	Radical Halogenation; Mechanism; Radicals; Bond Energies; Reaction Energies	4.1-4.7
	Sept. 21	Test 1. Chapters 1-3.	Test
11	Sept. 24	Rate Laws, Transition States, Stability-Reactivity Principles	4.7-4.13
12	Sept. 26	Radical Brominations. Major product, mechanism, structure isomers. Stability patterns for carbon radicals, cations, and anions.	4.13-4.16
13	Sept. 28	Chiral vs achiral, Enantiomers, Recognizing/Drawing Mirror Images.	5.1-5.3
14	Oct. 1	Chiral Carbons; Attachment Priorities; R/S Designation; Drawing Chiral Molecules	5.3-5.8
15	Oct. 3	Racemic Mixtures, Optical Activity, Meso, Molecules with More than One Chiral Center	5.11-5.16
16	Oct. 5	Drawing Stereoisomers, Meso Compounds. Alkyl Halides Intro, Classification, and Naming	6.1-6.7
		Skip 5.10	
17	Oct. 8	The Sn2 Substitution Reaction.	6.8-6.12
18	Oct. 10	The Sn1 Substitution Reaction.	6.13-6.16
19	Oct. 12	SN1 REactions in More Depth. Elimination Reactions	6.17-6.21
	Oct. 15	Non-instructional Day	No class
20	Oct. 17	E1 and E2 Reactions in More Depth; Recognizing Which Reaction Will Occur. Catchup, Practice.	Catchup
21	Oct. 19	Intro to alkenes, Elements of Unsaturation (EU), Hydrogenation + Isomers; Alkene Nomenclature	7.1-7.7
	Oct. 22	Test 2. Chapters 4-6	Test
22	Oct. 24	Hydrogenation; Bulky Bases/Hofmann E2; Alkene Synth from RBr or Alcohol; Mech Recognition.	7.7-7.10
23	Oct. 26	Catchup; Addition reactions to Alkenes. HX addn, Markovnikov/Anti-Markovnikov	8.1-8.4
		Skip 7.11	
24	Oct. 29	Direct and indirect Addition of HOH, Markovnikov/Anti-Markovnikov.	8.1-8.5
25	Oct. 31	Acid-Catalyzed HOH Addn; Oxymercuration; Hydroboration-Oxidation; Synthesis Design	8.4-8.7
26	Nov. 2	H ₂ addn; Br ₂ and Br ₂ /H ₂ O addn; mechanisms. Synthesis Design	8.5-8.7,8-10
		Skip 8.11	
27	Nov. 5	Epoxidation, Dihydroxylation, Ozonolysis. Stereospecific Alkene Reactions.	8.8-8.9
28	Nov. 7	Addition Polymers. Synthetic Design. Catchup.	8.12-8.16
29	Nov. 9	Conjugation, Molecular Orbitals, Dienes, Allylic Cations, (15-3 will be covered only very briefly; skim briefly)	15.1-6
	Nov. 12	Veteran's Day, NO CLASS	No class
	Nov. 14	Test #3 Covering Chapters 7,8	Test 3
30	Nov. 16	Allylic cations and 1,2/1,4-addn to Dienes. NBS and Allylic radicals. Acidity and Allylic Anions. (Skip "endo rule" section in 15.11A, p. 684; Skip 15.12,13)	15.7-11
32	Nov. 19	Diels-Alder Reaction; Aromaticity	15.11, 16.1-2
33	Nov. 21	Thanksgiving Break	No class
34	Nov. 23	Thanksgiving Break	No class
		(Skip 16.11,14,15)	
35	Nov. 26	Aromaticity; Huckel's Rule and Complex Aromatics	16.1-7
	Nov. 28	Complex Aromaticity, Application, Nomenclature	16.8-11, 13
	Nov. 30	Electrophilic Aromatic Substitution: Intro, Mech, Kinetic Effects	17.1,6-8
36	Dec. 3	Reactions in Detail: Halogenation, Nitration, Sulfonation, Alkylation, Acylation	17.2-5,10,11
37	Dec. 5	Catchup; Addition to Disubstituted Benzenes; Synthetic Applications	17.9, practice
38	Dec. 7	Side Chain Reactions; Retrosynthesis; Synthetic Applications; Practice	17.14
	Dec. 10	Test #4 Covering Chapters 15-17	Test
	Dec. 14	Final Exam, Cumulative. 11:30 FRIDAY	Final Exam